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February 21, 2003

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USPTO

From: Lisa A. Haile, J.D., Ph.D. Client-Matter Number: 101668-17
858-677-1456

FAX RECEIVED

FEB 23 2003

Re: **United States Patent Application No.:** 09/889,251
Entitled: METHODS OF TREATING MITOCHONDRIAL DISORDERS
Inventor: Robert K. Naviaux
Filed: November 1, 2001
Our Ref. No.: UCSD1140-1

GROUP 1600

OFFICIAL

Pages: - 2 - (including this form) Originals: will be mailed will not be mailed

If there is a problem with this transmission, please call (858) 638-6715/Carrie Bickle
Message:

In advance of our telephone interview scheduled for Monday, February 24, 2003, following for your review is an alternative version of claim 1 in the above-identified application. The alternative claim language set forth herein likely serves as a good starting point for our discussion on Monday.

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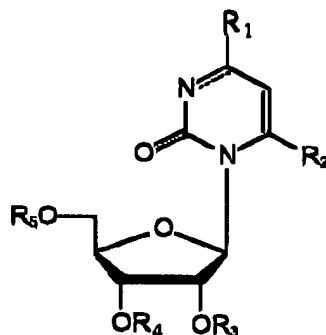
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(Form Rev. 6/5/00)

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I. (Amended) A method for the treatment of a mitochondrial disorder comprising administering to a subject having or at risk of having such disorder an effective amount of a compound of Formula I:

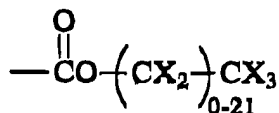


(I)

wherein:

R₁ is O, OH, NHCOCH₃, or NH₂,

R₂ is H, CO₂H, or



wherein:

each X is independently H or optionally substituted C₁-C₂₂ alkyl, optionally substituted C₁-C₂₂ alkenyl, or optionally substituted C₁-C₂₂ alkynyl, with substituents selected from the group consisting of H, C₁-C₃ alkyl, OH, NH₂, and halogen,

R₃, R₄, and R₅ are each independently optionally substituted C₁-C₂₂ alkyl carbonyl, with substituents selected from the group consisting of C₁-C₃ alkyl, OH, NH₂, and halogen, or H, wherein at least one of R₃, R₄, and R₅, are not H, and

wherein the administration of a compound of Formula (I) augments *de novo* synthesis of pyrimidines in a cell intended to be so treated,
thereby treating the disorder.